G. PLUMMER.

LIFE SAVING AND SWIMMING APPARATUS.

(Application filed Nov. 4, 1899.)

(No Model.)

Witnesses:

Inventor:
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UNITED STATES PATENT OFFICE.

GEORGE PLUMMER, OF GEORGETOWN, MASSACHUSETTS.

LIFE-SAVING AND SWIMMING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 661,293, dated November 6, 1900.

Application filed November 4, 1899. Serial No. 735,828. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PLUMMER, a citizen of the United States, residing at Georgetown, in the county of Essex and State of Mas-5 sachusetts, have invented certain new and useful Improvements in Life-Saving and Swimming Apparatus; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to swimming apparatus, more especially for those persons un-

able to swim.

The objects of my invention are to produce a swimming apparatus that can be easily and 20 readily applied to and detached from the person when using the same; also, to facilitate the swimming operation and prevent as much as possible the retardation of the swimmer; furthermore, to prevent any inconvenience dur-25 ing the act of swimming; also, that it can be readily adjusted to larger or smaller persons, and, finally, that the swimming apparatus can be produced at a reasonable expense and that it is not liable to get out of order; also, 30 that it serves as life-saving apparatus.

With these objects in view my invention consists in the peculiar construction of certain details and the novel arrangement of parts, as will be more fully described here-35 inafter, and specifically pointed out in the claim, reference being had to the accompanying drawings and the letters thereon.

Like letters indicate similar parts in the different figures of the drawings, in which-

Figure 1 represents the rear of a man with the swimming apparatus in position. Fig. 2 is a side elevation of the same. Fig. 3 is an enlarged cross-section of one of the tubes employed at the point where it passes over the 45 shoulder. Fig. 4 is a detail view of the leg

apparatus.

In the drawings, A and B are two tubes, of rectangular or similar cross-section, which extend from the lower end of the back, ex-50 tending over the shoulders and passing down

tubes may be made of light copper, aluminium, canvas, rubber, or any other suitable material. They are secured to the body by the straps abc with suitable buckles. These 55 belts may be provided with snap-hooks and rings or their equivalents, so that they can be readily attached and detached, if desired. The said belts may be made of canvas and very wide to prevent cutting or pinching of 60 the body. A belt may also be used to pass under the crotch and be attached to the lower belt c in any suitable manner.

In connection with the tubes A and B are employed leg attachments C, secured on the 65 inside of the leg by belts or straps d, which pass around the same, and a strap e, that passes under the instep of the foot to the tubes C' on the outside of the leg, which are provided with three or more hinged hip- 70 shaped paddles D of the form shown. The hinges are provided with knuckle-joints g, so that the paddles will not open more than about ninety degrees from the side of the tubes. To prevent them from closing against 75 the tubes, studs h are provided at the proper places and secured to the tubes, so that the paddles can close against said studs. By holding them in this manner the water can enter better and has a tendency to open the 80 paddles wide when kicking backward with the feet. These paddles are made hollow, so as to assist in the buoyancy of the body. They are shown in detail in Fig. 4.

The tubes A and B are preferably made of 85 the cross-section, shown on an enlarged scale in Fig. 3, thus forming cutting edges i'where they pass over the shoulders, so as not to retard the body in swimming through the water. The lower ends of said tubes are also 90 made tapering or conical to allow the water to freely pass off, similarly to the stern of a boat. If desired, the part of the tubes passing against the body and the legs may be lined with some soft material or padded, so 95 as not to cause any inconvenience to the body in swimming. If a bathing-suit is employed, the padding would not be necessary or re-

quired.

It will be readily understood by those 100 skilled in the art that this will not only form the front of the body to near the groin. These | a swimming apparatus, but a life-saving apparatus, as the buoyancy of the tubes, which are filled with air, will have a tendency to

support the body in the water.

The many advantages possessed by my improved swimming apparatus will be apparent to any one, and among them may be mentioned that the tubes on the body, as well as the legs, being light and hollow and filled with air, impart a great deal of buoyancy to the body; by the use of the pivoted paddles or fins on the leg attachments a very large surface to propel against the water is produced; the swimming apparatus can be employed by unskilled as well as skilled persons and a long distance can be readily and easily made by any one using it; it can be speedily and readily attached and detached, and it will be always found ready for use.

If desired, diaphrams may be employed in the tubes A and B in case of a puncture of said tubes, and thus to prevent them from

filling with water.

The tubes may be made oblong or any equivalent shape in cross-section.

Having thus described my invention, what 25 I claim, and desire to protect by Letters Pat-

ent, is—

The life-saving and swimming apparatus described, consisting of the tubes A and B, tapered at each end and provided with cutting edges i' where said tubes pass over the shoulders and secured by belts a, b, c, in combination with the leg attachments, formed of the tubes C, C', provided with the hip-shaped paddles D attached by knuckle-joints g to 35 said tubes C', secured by straps d, e, and all arranged as shown and specified.

In testimony whereof I affix my signature

in presence of two witnesses.

GEORGE PLUMMER.

Witnesses:
WM. H. WETZEL,
CHAS. J. WETZEL.